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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/452,328

**Applicant(s)**

PORTER, SWAIN W.

**Examiner**

DOHM CHANKONG

**Art Unit**

2452

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 10-36 and 38-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-36, and 38-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to Applicant's arguments filed on 4/15/2009. Claims 10, 12, 13, 15, 16, 21, 35, 39, 41, 42, 44, 46, 49, and 50 are amended. Claims 7-9 and 37 were previously canceled. Claims 51 and 52 are added. Accordingly, claims 1-6, 10-36, and 38-52 are presented for further examination.
2. This action is a final rejection.

***Response to Arguments***

3. As to the § 101 rejection of claims 47 and 48, Applicant's arguments have been considered but are not persuasive. Applicant argues that there is disclosure of adequate structure in the specification. Applicant points to the disclosure of various components such as processors or memory. However, those elements are not considered part of the claimed apparatus because there is no means being claimed related those structural elements. Applicant should consider amending the claim to recite that a means for performing the functions performed by the processor or memory components.
4. Applicant argues that Marchisio fails to disclose the limitation of a list containing the first and second term where the list is established prior to the retrieving and displaying of the first information page. Applicant argues that Marchisio instead discloses a list that is dynamically generated after a keyword is selected. Applicant specifically points to Marchisio's knowledge

base which is disclosed as being automatically generated from the observed statistical distribution of terms and word co-occurrences in the document database.

Applicant's arguments are persuasive to the extent that Marchisio's lexical knowledge base cannot read on the claimed list. However, the lexical knowledge base is generated from an information matrix that contains a distribution of terms and word co-occurrences [Fig. 3]. This matrix contains all the words within a document database [Fig. 4] and is generated prior to receiving a search query from a user [column 5 «lines 8-11»: "the present system performs a number of document processing steps to *pre-process the documents* in the set of searchable documents, in order to generate a representation of the search space"].

Marchisio discloses one example where a user uses the search query "Shakespeare" [column 15 «lines 22-25»] and then performing the steps of automatically generating the lexical knowledge base as Applicant notes. However, the terms used to generate the knowledge base are culled from previously established term matrix [Fig. 4: the term "Shakespeare" in the term matrix]. The algorithms that Marchisio discusses to establish the knowledge base relate to the information stored in the matrix such as the number of occurrences of each of the terms.

Based on the foregoing discussion, Marchisio's term information matrix as illustrated in Fig. 4 reads on Applicant's claimed list that contains the first and second words where the list is established prior to the retrieving of a first information page.

5. Applicant also amends claim 15 to recite that the list is "user-defined" to overcome the Marchisio reference which discloses that the user list is automatically generated. However, the fact that the list is automatically generated does not preclude the possibility that a user may later

edit or "define" the list. For example, Niemi discloses that a user has control over the algorithms that calculate the keywords that are put on the list [column 7 «lines 28-44»]. In Niemi, a user may define the keywords that are searched for in the documents.

So while the list is "automatically" generated, they are generated in response to user-defined rules that establish which words are used in the generation process. Thus, the combination of Niemi and Marchisio disclose the limitation of a "user-defined" list as claimed.

6. For the foregoing reasons, Applicant's arguments are not persuasive. Applicant's amendment to claim 15 does not overcome the cited references. Thus, the rejection as set forth in the previous action are maintained.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 47 and 48 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on their language, claims 47 and 48 are presumed to invoke 35 U.S.C. §112, sixth paragraph. *See MPEP §2181(I)*. Thus, the means are interpreted consistent with the elements specified in Applicant's that perform these steps. As to the first means, Applicant describes a browser that retrieves and displays first content. As to the second means, Applicant also describes that the browser is intended to assemble and augment the first information page with one or more source identifiers. Browsers are software applications; as such, claim 47 is directed to software *per se* which is not statutory under §101. Applicant

should therefore amend the claim to include means that can only be interpreted as hardware elements.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 10, 11, 18, 21, 22, 25-27, 30-32, 35, 36, 39-41, and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi (U.S. Patent Number 6,415,294) in view of Marchisio (U.S. Patent Number 6,510,406), in further view of Kohli, U.S. Patent No. 6,519,585.

9. Niemi disclosed a method for retrieving an electronic file that utilizes keywords identified in a downloaded page to introduce links into the page that appear as user selectable items. In an analogous art, Marchisio disclosed a method for retrieving an electronic file that takes into consideration groups of conceptually related keywords when performing a web search. Similarly, Kohli is directed to a search engine that provides synonymous terms based on subject categorizations [abstract].

10. Concerning claims 1, 18, 21, 25, 30, 35, 39, 47, and 49, Niemi did not explicitly state that the identified information pages are selected based at least in part on second keywords

determined to be related to first keywords present in the first information page. Although Niemi does teach identifying other information pages based on keywords, he is not explicit in teaching second keywords different from but related to these keywords present in the first information page nor does Niemi disclose the first and second keywords in a list established prior to the retrieving and displaying of the first information page.

However, using additional keywords related to the first keywords to identify other information pages was well known in the art as evidenced by Marchisio whose system utilizes groups of conceptually related keywords when performing a web search. Marchisio also discloses the first and second keywords present in a list established prior to the retrieving and displaying of the first information page where the list relates the second keywords to the first keywords [see response to arguments, *supra* | Figure 7: search term is “wind” and Marchisio discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5»].

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Niemi by adding the ability to select the identified information pages based at least in part on second keywords determined to be related to first keywords present in the first information page as provided by Marchisio. Here the combination satisfies the need for an electronic file retrieval system that makes it easier for the user to locate information which is relevant to a current task. See Niemi, column 1, lines 12-21. This rationale also applies to those dependent claims utilizing the same combination. Such a modification is an example of using of known technique (Marchisio's knowledge base and association functionality in an information retrieval system) to improve similar devices (methods, or products) (Niemi's

information retrieval system) in the same way (Marchisio discloses his base provides enhanced searching capability). *See MPEP §2143.*

11. Also concerning claims 1, 18, 21, 25, 30, 35, and 39, while Niemi does disclose first keywords present in a list of keywords and Marchisio discloses a list established prior to retrieving and displaying the first information page and relating first and second keywords, they do not disclose that the established list is provisioned based on established categories of keywords. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by Kohli.

Kohli is directed to a search engine that provides synonymous search terms a user based on the subject categorization of a provided search term. Kohli accomplishes this functionality by establishing a synonym list that relates keywords and that are organized based on subject. For example, Kohli discloses establishing a list of keywords provisioned based on the category of medicine [Figure 7]. Therefore, a search for "physician" would result in retrieving the second keywords based on the list [Figure 7 | column 6 «lines 48-64»]. It would have been obvious to one of ordinary skill in the art to adapt Niemi's system to include Kohli's subject categorization functionality. One would have been motivated to modify Niemi as Kohli's functionality would improve Niemi's ability to more accurately and flexibly display web pages based on a user's desired subject of interest [see Kohli, column 1 «lines 53-62»].

The use of a list of keywords provisioned based on an established category would be further helpful to promote Niemi's purpose of finding similar web pages. For example, if a user enters a search query within a "Sports" category, the modified Niemi invention would retrieve



already downloaded web pages (in the client's cache for example) containing relevant Sports keywords. The fact that Niemi is directed towards finding web pages that have been previously downloaded has no relation to whether it may or may not contain keywords within the same category of a currently viewed web page.

12. Thereby, the combination of Niemi, Marchisio, and Kohli discloses:

- <Claims 1, 47, and 49>

An automated method for assisting a user of a client system in retrieving and browsing information, the method comprising:

retrieving, by the client system, and displaying on a display of the client system for browsing, a first information page having first contents, responsive to user direction (*Niemi*, column 4, lines 2-16); and

automatically assembling and augmenting, by the client system, the first information page being browsed with one or more information source identifiers directly identifying one or more additional information pages with second contents that may be additionally retrieved (*Niemi*, column 5, lines 8-17 and column 6, lines 33-40), the one or more directly identified additional information pages being selected based at least in part on second keywords different from but determined to be related to first keywords present in the first information page, the first and second keywords present in a list established prior to the retrieving and displaying of the first information page, the list relating the second keywords to the first keywords (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is "wind" and Marchisio discloses generating a list of wind, storm,

hurricane, snow, mph, rain, and weather | column 11 «lines 1-5») and provisioned based on established categories of keywords [Kohli, Figure 7 | column 6 «lines 48-64»], and the second contents directly augmenting the first content (*Niemi*, column 6, lines 41-60 and column 7, lines 14-20).

- <Claims 2, 48, and 50>

The method of claim 1, wherein the method further comprises performing on said client system in real time, on retrieval of the first information page, analysis of the first information page to determine presence of said first keywords in the portion of the content of said first information page on which said automatic assembling and augmenting is based (*Niemi*, column 5, lines 8-17).

- <Claim 3>

The method of claim 2, wherein said analysis comprises performing on said client system in real time, on retrieval of the first information page, scanning of said first information page for unique nouns presence, accessing the keyword list [Kohli, column 6 «lines 48-64»] to determine if any of the unique nouns are to be considered as keywords, and outputting those unique nouns that should be so considered as the presence of first keywords (*Niemi*, column 4, line 21 through column 5, line 17).

- <Claim 4>

The method of claim 3, wherein the method further comprises designating to a browser of the client system a first of a plurality of tables of keywords as the keyword list [*Niemi*, column 4, lines 49-53].

- <Claim 5>

The method of claim 4, wherein the method further comprises loading/downloading said plurality of tables of keywords onto the client system (*Niemi*, column 4, lines 21-53).

- <Claim 6>

The method of claim 3, wherein said analyzing further comprises performing on said client system in real time, on retrieval of the first information page, retrieval of the second keywords related to the presence of first keywords from one or more tables of related keywords, using said presence of first keywords (*Marchisio*, column 16, lines 44-52).

- <Claim 10>

The method of claim 3, wherein the information about the first information page is a selected one of (a) a locator of the first information page identifying a third party location from where the first information page is being retrieved, (b) a plurality of unique nouns of the first information page, (c) a plurality of first keywords present in the first information page, and (d) a plurality of second keywords related to the first keywords (*Niemi*, column 5, lines 8-17).

- <Claim 11>

The method of claim 1, wherein said first information page is an information page constituted using a mark-up language (*Niemi*, column 3, lines 52-64).

- <Claim 18>

In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving from said client system in real time via a computer networking connection, on retrieval from a third party location by the client system a first information page to be browsed on the client system (*Niemi*, column 4, lines 2-16 and column 7, lines 51-61), first keywords different from but related to presence of second keywords in the first information page and present in a list established prior to the retrieval of the first information page, the list relating the second keywords to the first keywords (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and *Marchisio* discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5») and provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»], where at least the second keywords present in the first information page are dynamically determined by the client system in real time on retrieval of the first information page (*Niemi*, column 5, lines 8-17); and

in response, providing to said client system a plurality of information source identifiers identifying a plurality of additional information pages that may be additionally retrieved (*Niemi*, column 6, lines 33-40), based at least in part on said received related first keywords to enable the first information page to be automatically augmented on the client system with information source identifiers identifying information pages based on the related first keywords (*Niemi*, column 6, lines 41-60 and column 7, lines 14-20).

- <Claim 21>

In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving from said client system in real time, wherein the client system is stored as a module on a computer system separate from a computer system on which the server system is stored, on retrieval from a third party location by the client system a first information page having first content to be browsed on the client system (*Niemi*, column 4, lines 2-16 and column 7, lines 51-61), presence of first keywords in the first information page, the first keywords also present in a list of keywords established prior to the retrieving and displaying of the first information page (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and *Marchisio* discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5») and provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»], and where presence of the first keywords of the first information page are dynamically determined in real time by the client system on retrieval of the first information page (*Niemi*, column 5, lines 8-17); and

in response, providing to said client system a plurality of information source identifiers directly identifying a plurality of additional information pages with second contents that may be additionally retrieved, based at least in part on second keywords different from but related to the first keywords, the list of keywords relating the first keywords to the second keywords (*Niemi*, column 6, lines 33-40 and *Marchisio*, Figure 7

| column 16, lines 38-58), the second contents directly augmenting the first contents (*Niemi*, column 6, lines 41-60 and column 7, lines 14-20).

- <Claim 22>

The method of claim 21, wherein the method further comprises dynamically determining second keywords related to said first keywords; and said providing of information source identifiers to said client system is made based at least in part on said dynamically determined related second keywords (*Marchisio*, column 16, lines 44-52).

- <Claim 25>

In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving via a network connection from said client system in real time, on retrieval from a third party location by a client system a first information page with first contents to be browsed on the client system (*Niemi*, column 4, lines 2-16 and column 7, lines 51-61), unique nouns of the first information page, where the unique nouns are dynamically determined in real time by the client system on retrieval of the first information page (*Niemi*, column 5, lines 8-17); and

in response, providing to said client system a plurality of information source identifiers directly identifying a plurality of additional information pages with second contents that may be additionally retrieved (*Niemi*, column 6, lines 33-40), based at least in part on second keywords different from but related to first keywords present in the first information page and present in a list of keywords established prior to the retrieving and

displaying of the first information page, the list relating the second keywords to the first keywords (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and *Marchisio* discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5»), and provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»], the second contents directly augmenting the first contents (*Niemi*, column 6, lines 41-60 and column 7, lines 14-20).

- <Claim 26>

The method of claim 25, wherein the method further comprises dynamically determining the first keywords present in said first information page using said received unique nouns (*Niemi*, column 5, lines 8-17).

- <Claim 27>

The method of claim 26, wherein the method further comprises dynamically determining the related second keywords of said presence of first keywords (*Marchisio*, column 16, lines 44-52).

- <Claim 30>

In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving via a network connection in real time from said client system, on retrieval from a third party location by the client system a first information page to be browsed on the client system, a locator of the first information page identifying the third party location (*Niemi*, column 4, lines 2-16 and column 7, lines 51-61); and

providing to said client system a plurality of information source identifiers identifying a plurality of additional information pages that may be additionally retrieved (*Niemi*, column 6, lines 33-40), based at least in part on second keywords different from but related to first keywords present in the first information page and present in a list of keywords present in a list established prior to the retrieving and displaying of the first information page, the list relating the second keywords to the first keywords (*Niemi*, column 5, lines 8-17 | see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and Marchisio discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5») and provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»].

- <Claim 31>

The method of claim 30, wherein the method further comprises retrieving said first information page and dynamically analyzing the retrieved first information page in real time to determine presence of first keywords in said information page (*Niemi*, column 5, lines 8-17).

- <Claim 32>

The method of claim 31, wherein the method further comprises dynamically determining the related second keywords of said presence of first keywords (*Marchisio*, column 16, lines 44-52).

- <Claim 35>

A client system comprising:  
a display (*Niemi*, figure 1, item 6);



a networking device (*Niemi*, figure 1, item 2);

a program configured to facilitate augmented viewing of a first retrieved information page having first contents (*Niemi*, figure 1, item 5 and column 4, lines 2-16), including an analyzer configured to analyze the first contents to determine a plurality of unique nouns present, determine which of the plurality of unique nouns are first keywords present in a static list of keywords established prior to the retrieval of the first information page (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and *Marchisio* discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5»), the list provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»], transmit second keywords different from but related to the first keywords to a server via the networking device (*Niemi*, column 4, line 21 through column 5, line 17 and column 7, lines 51-61 and *Marchisio*, column 16, lines 38-58), receive a plurality of information source identifiers directly identifying a plurality of additional information pages with second contents that may be additionally retrieved, the second contents directly augmenting said first contents, and to dynamically and automatically assemble the plurality of information source identifiers into the first information page (*Niemi*, column 5, lines 8-17; column 6, lines 33-60; and column 7, lines 14-20); and

an information source database having a plurality of first keywords and a plurality of second keywords related to the plurality of first keywords (*Marchisio*, column 16, lines 38-58).

- <Claim 36>

The client system of claim 35, wherein the analyzer further comprises a lexical analyzer to facilitate determination in real time the unique nouns (*Niemi*, column 5, lines 8-17).

- <Claim 39>

A server system comprising:

a network interface configured to couple the server system to a network (*Niemi*, figure 1, item 2);

an information source database configured to store a first plurality of keywords, a second plurality of keywords different from but related to the first plurality of keywords, and a plurality of associated information source identifiers of the first keywords, directly identifying a plurality of information pages with first contents that may be retrieved (*Niemi*, column 4, lines 21-60 and *Marchisio*, Figure 7 | column 16, lines 38-59); and

a plurality of programming instructions coupled to the network interface and the information source database, and configured to facilitate automatic augmented provision of dynamically assembled additional information source identifiers by a browser of a client system communicatively coupled via the network, the client system provisioning a list of keywords established prior to the retrieval of the first information page, the list relating the first plurality of keywords to the second plurality of keywords (see response to arguments, *supra* | *Marchisio*, Figure 7: search term is “wind” and *Marchisio* discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5») and provisioned based on established categories of keywords [*Kohli*, Figure

7 | column 6 «lines 48-64»], the keywords of the keywords list comprising at least some of the first plurality of keywords, the dynamically assembled information source identifiers comprising a subset of the plurality of associated information source identifiers, and dynamically assembled by the programming instructions accessing the information source database, based at least in part on a portion of a first information page with second content retrieved from a third party location for browsing on said client system, the first contents directly augmenting the second contents (*Niemi*, column 5, lines 8-17; column 6, lines 33-60; column 7, lines 14-20; and column 7, lines 51-61).

- <Claim 40>

The server system of claim 39, wherein the server system further comprises a keyword database, having said second plurality of keywords and said first plurality of keywords, the first and second keywords being related, configured to facilitate determination of related second keywords of presence of first keywords in the first retrieved information page (*Marchisio*, column 16, lines 38-58).

- <Claim 41>

The server system of claim 39, wherein the plurality of programming instructions are further configured to implement a lexical analyzer configured to facilitate determination of unique nouns in said first retrieved information page being browsed, for use in determining presence of said first keywords in said first retrieved information page being browsed (*Niemi*, column 5, lines 8-17).

Since the combination of *Niemi*, *Marchisio*, and *Kohli* discloses all of the above limitations, claims 1-6, 10, 11, 18, 21, 22, 25-27, 30-32, 35, 36, and 39-41 are rejected.

13. Claims 12-17, 19, 20, 23, 24, 28, 29, 33, 34, 38, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi in view of Marchisio and Kohli, as applied above, further in view of Finseth et al. (U.S. Patent Number 6,271,840), hereinafter referred to as Finseth.

14. The combination of Niemi, Marchisio, and Kohli disclosed a method for retrieving an electronic file that utilizes a list of keywords provisioned by a user selection of a category identified in a downloaded page to introduce links into the page that appear as user selectable items. In an analogous art, Finseth disclosed a search engine visual index method that provides graphical output from search engine results or other URL lists.

15. Concerning claim 15 and like dependent claims, the combination of Niemi, Marchisio, and Kohli did not explicitly state presenting a thumbnail of a second information page corresponding to a first of the identified information pages. However, Finseth does state this feature as his system creates rendered images of additional information pages that correspond to a first page. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Niemi, Marchisio, and Kohli by adding the ability to present a thumbnail of a second information page corresponding to a first of the identified information pages as provided by Finseth. Here the combination satisfies the need for an electronic file retrieval system that makes it easier for the user to locate information which is

relevant to a current task. See Niemi, column 1, lines 12-21. This rationale also applies to those dependent claims utilizing the same combination.

16. Thereby, the combination of Niemi, Marchisio, Kohli, and Finseth discloses:

- <Claim 12>

The method of claim 1, wherein the method further comprises displaying on said display a selected one of (a second information page corresponding to a first of the additional information pages, and a thumbnail of the second information page) (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 13>

The method of claim 12, wherein said displaying of a thumbnail comprises performing on said client system in real time, on retrieval of the first information page, a selected one of (a) retrieving said thumbnail and (b) retrieving said second information page and dithering said retrieved second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 14>

The method of claim 12, wherein said displaying of a thumbnail is made responsive to proximate placement of a cursor next to a first information source identifier corresponding to said second information page (*Finseth*, column 8, lines 46-55).

- <Claim 15>

An automated method for assisting a user of a client system to retrieve and browse information, the method comprising:

retrieving and displaying on a display of the client system for browsing, a first information page having content, responsive to user direction (*Niemi*, column 4, lines 2-16);

performing on said client system in real time, on retrieval of the first information page, analysis of the first information page to determine presence of first keywords in at least a portion of the content of said first information page (*Niemi*, column 5, lines 8-17), and retrieval of second keywords different from the first keywords and related to the first keywords (*Marchisio*, Figure 7 | column 16, lines 38-58);

transmitting by the client system over a network connection the second keywords to a server which is not a source server of the first information page (*Niemi*, column 5, lines 2-7 and column 7, lines 51-61);

automatically assembling and augmenting by the client system the first information page being browsed with one or more information source identifiers identifying one or more additional information pages that may be additionally retrieved, based at least in part on the automatically determined presence of first keywords in said portion of the content of said first information page, and said second keywords (*Niemi*, column 6, lines 33-40), said first keywords and second keywords present in a user-defined list established prior to the retrieving and displaying of the first information page, the list relating the second keywords to the first keywords (see response to arguments, *supra* | *Niemi*, column 7 «lines 28-44»: user defines the words that are used in generating the list | *Marchisio*, Figure 7: search term is “wind” and Marchisio discloses generating a list of wind, storm, hurricane, snow, mph, rain, and weather | column 11 «lines 1-5»)and

provisioned based on established categories of keywords [*Kohli*, Figure 7 | column 6 «lines 48-64»], said one or more information source identifiers received from the server in response to the transmission (*Niemi*, column 5, lines 8-17 and column 6, lines 33-40); and

presenting on the display of the client system, responsive to a user event, a thumbnail of a second information page corresponding to a first of the identified information pages (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 16>

The method of claim 15, wherein said presenting of the thumbnail comprises performing on the client system in real time, a selected one of (a) retrieving said thumbnail and (b) retrieving said second information page, and dithering said retrieved second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 17>

The method of claim 15, wherein said presenting of the thumbnail is made responsive to proximate placement of a cursor next to a first information source identifier corresponding to the second information page (*Finseth*, column 8, lines 46-55).

- <Claim 19>

The method of claim 18, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 20>

The method of claim 19, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 23>

The method of claim 21, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 24>

The method of claim 23, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 28>

The method of claim 25, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 29>

The method of claim 28, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).



- <Claim 33>

The method of claim 30, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 34>

The method of claim 33, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 38>

The client system of claim 35, wherein the client system further comprises a dithering module to dither a second information page retrieved to augment the first retrieved information page, to generate a thumbnail of the second retrieved information page (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

- <Claim 42>

The server system of claim 39, wherein the plurality of programming instructions are further configured to implement a dithering module configured to dither a second retrieved information page retrieved to augment the first retrieved information page to generate a thumbnail of the second retrieved information page (*Finseth*, figure 7, item 142 and column 5, lines 32-52).

Since the combination of Niemi, Marchisio, Kohli, and Finseth discloses all of the above limitations, claims 12-17, 19, 20, 23, 24, 28, 29, 33, 34, 38, and 42 are rejected.

17. Claim 43 is rejected under 35 U.S.C §103(a) as being unpatentable over Niemi, Marchisio, and Kohli in further view of Hoyle, U.S Patent No. 6,141,010.

18. Niemi as modified by Marchisio and Kohli does not expressly disclose transmitting a server information about the first information page, wherein the server is not a source server of the first information page and receiving said one or more information source identifiers from the server in response to the transmission. However, such a feature was well known in the art at the time of Applicant's invention.

Hoyle discloses the well known functionality of a client transmitting information about a first information page to a server, wherein the server is not a source server of the first information page, and receiving said one or more information source identifiers from the server in response to the transmission and receiving said information source identifiers from the server [column 1 «lines 55-65» : accessing an advertising server by sending information about the first information page and receiving advertising source identifiers from the ad server]. It would have been obvious to one of ordinary skill in the art to have incorporated the advertising server functionality into Niemi's system to add the functionality of providing targeted advertising relevant to a user's search [column 16 «lines 24-35»].

19. Claims 44-46 are rejected under 35 U.S.C. §103(a) as being unpatentable over Niemi in further view of Marchisio.

20. As to claims 44-46, they are rejected for at least the same reasons set forth for the rejection of claims 1-3, *supra*.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571.272.3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dohm Chankong/  
Primary Examiner, Art Unit 2452